Kenton County, Kentucky

Kenton County is part of the Cincinnati-Hamilton, OH-KY-IN Metropolitan Statistical Area (MSA) and is located to the west of Campbell County, Kentucky, to the east of Boone County, Kentucky, and to the south of Cincinnati, Ohio.

EPA's June 29, 2004 proposal on appropriate designations for Kentucky included Kenton County as nonattainment based on the following criteria:

- EPA indicates that Kenton County has monitoring data very close to the $PM_{2.5}$ standard, and that this indicates a potential to contribute to the $PM_{2.5}$ violations in the area;
- EPA states that Kenton County has relatively high population values, VMT, and commuting patterns that are significant enough to contribute to $PM_{2.5}$ violations in the MSA.

Monitoring Data and Trends

The monitor located in Kenton County shows attainment with the $PM_{2.5}$ standard. For the 2001-2003 timeframe the design value (14.9 $\mu g/m^3$) demonstrates attainment with the annual standard. The annual concentrations for the area continue to show a downward trend as depicted in Figure 1, which utilized data from the year 2000 through April 2004.

Figure 1

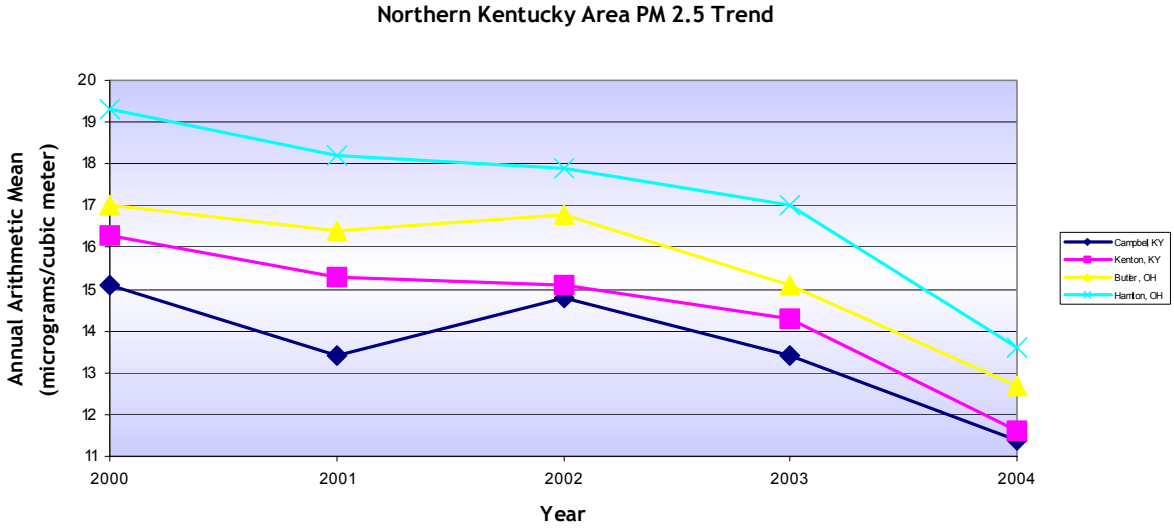
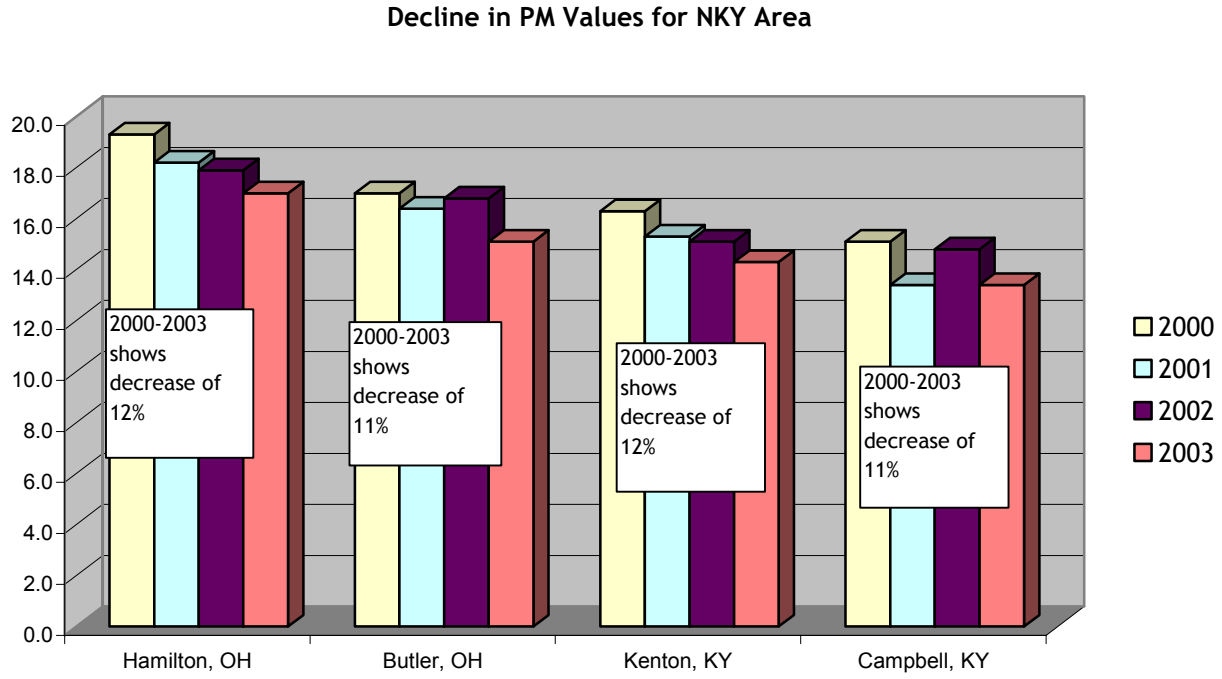


Figure 2



As depicted in Figure 2 above, monitoring data for the Northern Kentucky area shows an 11-12% decrease over from the year 2000 through 2003.

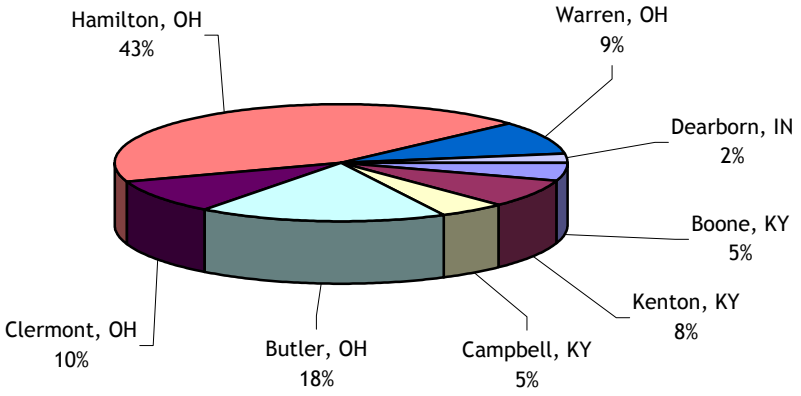
The Kenton County monitor is attaining the $PM_{2.5}$ standard. The continuing downward trend in $PM_{2.5}$ levels throughout the region indicate that air quality is improving in the region and should continue to do so over the next several years.

Population Growth and VMT Levels

EPA stated that Kenton County had relatively high population density that had the potential to impact $PM_{2.5}$ violations in the area. Kenton County makes up only 8% of the population in the entire MSA, see Figure 3 below.

Figure 3

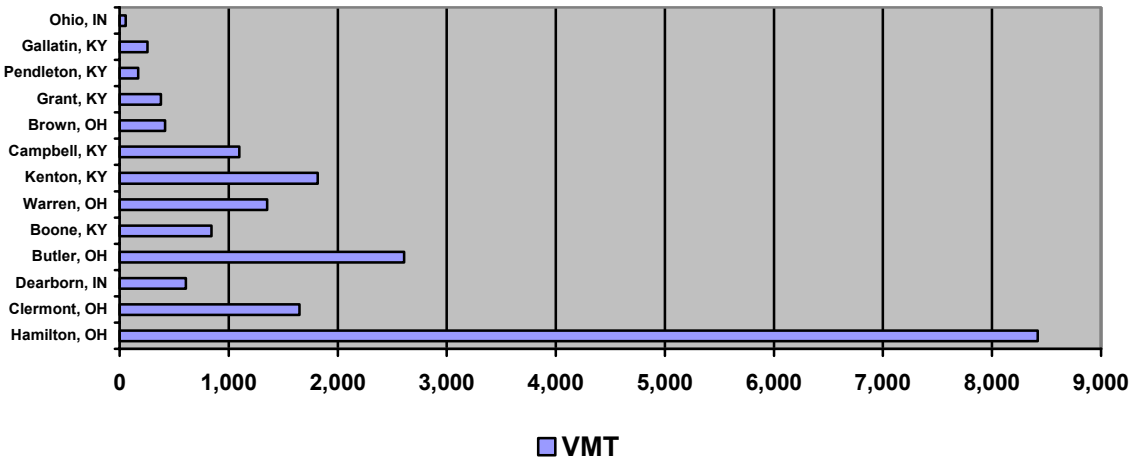
Northern Kentucky Area 2002 Population for USEPA Proposed $PM_{2.5}$ Nonattainment Counties



Therefore, Kentucky believes that the population density in Kenton County should not be used as a determining factor for potential contributions to $PM_{2.5}$ violations in Southwestern Ohio.

Based on EPA's June 29, 2004, discussion of VMT data in the region, an attempt was made to segregate county VMT data by state rather than reviewing the data for the region as a whole. This is an unfair comparison. Data presented by EPA shows the overwhelming contribution from VMT in the area to be occurring outside of Kenton County. Figure 4 below outlines total VMT per county for the MSA.

Figure 4
Cincinnati-Hamilton MSA
VMT per year
In thousands



EPA's position on traffic and commuting patterns in the June 29th letter noted that Kenton County has potentially significant numbers of commuters impacting Hamilton County.

Although EPA stated that commuting patterns may play a role in $PM_{2.5}$ levels throughout the region, they also state that 20,200 commuters traveling from Kenton County into Hamilton County is insignificant when compared to total Hamilton County commuters in 2002. Kentucky agrees with EPA that commuter data is insignificant for Kenton County and therefore should not be used as a factor in determining nonattainment.

Additionally, when reviewing VMT data, it should be noted that in 2002 Kenton County contributed only 9.2% of the total VMT's in the counties recommended by EPA as having the potential to impact the violating monitors. Due to the small contribution from Kenton County, this factor should also not be used in determining a nonattainment designation for this county.

Therefore, it is Kentucky's position that Kenton County does not have the population density levels, commuter or VMT potential to contribute to $PM_{2.5}$ violations in the area.

Additional Regional/National Controls

The implementation of new federal rules to decrease the amount of sulfur in both gasoline and diesel fuel will significantly decrease the amount of SO_2 in the entire area. Because of the Low Sulfur Diesel Rule, in 2007, new clean engines operating on 15-ppm sulfur diesel fuel will reduce NOx emissions by 50%, and reduce PM emissions by more than 90%. Due to the Tier 2 Vehicle and Gasoline Sulfur program, by 2006 average national gasoline sulfur levels will be 90% lower.

Upon implementation of the Clean Air Interstate Rule (CAIR) SO_2 emissions from power plants will be reduced nationwide by 3.6 million tons in 2010 (approximately 40 percent below current levels) and by another 2 million tons per year when the rules are fully implemented (approximately 70 percent below current levels). NOx emissions would be cut by 1.5 million tons nationwide in 2010 and 1.8 million tons annually in 2015 (about 65 percent below today's levels).

The first phase of compliance under the CAIR rule to reduce both SO_2 and NO_x emissions would be required by 2010, allowing substantial emission reductions in the area, by the proposed attainment date for $PM_{2.5}$ nonattainment areas.

Conclusions

Based on the factors discussed above, Kentucky believes that Kenton County should be designated attainment for the $PM_{2.5}$ standard.

- $PM_{2.5}$ levels continue to decline throughout the entire region. From a review of all monitors in the region, an average 12% decline in $PM_{2.5}$ levels has occurred from 2000 through 2003. The Kenton County monitor in the region is currently showing attainment of the annual $PM_{2.5}$ standard using 2002 through 2004 data.

- Contributions from commuters and vehicle miles traveled in Kenton County have been shown to have no potential to impact $PM_{2.5}$ levels within the region when compared to the levels from other counties and therefore should not be used to determine nonattainment status for this county.

- Additional emission reduction on a national and regional level will provide substantial additional emission reductions in the region. The anticipated sulfur reductions due to the Low Sulfur Diesel Rule, the Tier 2 Vehicle and Gasoline Low Sulfur programs, and the Clean Air Interstate Rule (CAIR) will further lower pollutant levels within this region.

To have this county designated nonattainment would invoke additional, substantial, unnecessary requirements on local government planning agencies. Drastic emission reductions are scheduled to occur in the mobile sector throughout the next several years that will greatly impact pollutant levels in the area. Couple these changes with those anticipated by the CAIR provisions which will further reduce SO_x and NO_x emissions within the region, and the air monitoring data demonstrating attainment of the $PM_{2.5}$ Standard, the downward trend in monitored values, and the resulting conclusion is that Kenton County, Kentucky, should be designated attainment for the $PM_{2.5}$ Standard.